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| APPLICATION NO.                                  | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |  |
|--|-----------------|----------------------|------------------------------|------------------|--|
| 10/625,098                                       | 07/22/2003      | Hiroki Akano         | FUJA 20.519<br>(100794-00459 | 8771             |  |
| 26304  | 7590 05/08/2006 |                      | EXAM                         | EXAMINER         |  |
| KATTEN MUCHIN ROSENMAN LLP<br>575 MADISON AVENUE |                 |                      | STOICA,                      | STOICA, MARIA    |  |
| NEW YORK, NY 10022-2585                          |                 |                      | ART UNIT                     | PAPER NUMBER     |  |
|  |                 |                      | 3715                         |                  |  |
|  |                 |                      | DATE MAILED: 05/08/200       | 6                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

4.

|  | Application No.  | Applicant(s)  |  |  |  |
|--|--|---|--|--|--|
|  | 10/625,098   | AKANO, HIROKI   |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |
|  | Maria Stoica   | 3715  |  |  |  |
| The MAILING DATE of this communication Period for Reply  | appears on the cover sheet w   | ith the correspondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b). | B DATE OF THIS COMMUNIC<br>R 1.136(a). In no event, however, may a re-<br>riod will apply and will expire SIX (6) MON<br>atute, cause the application to become Al | CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |  |  |  |
| Status   |  |   |  |  |  |
| 1) Responsive to communication(s) filed on <u>0</u> 9  | Responsive to communication(s) filed on <u>09 November 2005</u> .  |   |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ T  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |   |  |  |  |
|  |  |   |  |  |  |
| closed in accordance with the practice unde  | er <i>Ex parte Quayle</i> , 1935 C.D   | ). 11, 453 O.G. 213.  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |
| 4)⊠ Claim(s) <u>1-13 and 35-42</u> is/are pending in t   | he application.  |   |  |  |  |
| 4a) Of the above claim(s) is/are without   | drawn from consideration.  |   |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |
| 6)⊠ Claim(s) <u>1-13 and 35-42</u> is/are rejected.  |  |   |  |  |  |
| 7) Claim(s) is/are objected to.  |  |   |  |  |  |
| 8) Claim(s) are subject to restriction an  | d/or election requirement.   |   |  |  |  |
| Application Papers   |  |   |  |  |  |
| 9)☐ The specification is objected to by the Exam   | niner.   |   |  |  |  |
| 10) The drawing(s) filed on is/are: a) a   | accepted or b) ☐ objected to   | by the Examiner.  |  |  |  |
| Applicant may not request that any objection to  | *  |   |  |  |  |
| Replacement drawing sheet(s) including the cor   |  |   |  |  |  |
| 11)☐ The oath or declaration is objected to by the   | Examiner. Note the attached  | d Office Action or form PTO-152.  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of:  |  | § 119(a)-(d) or (f).  |  |  |  |
| 1. Certified copies of the priority docum  |  |   |  |  |  |
| 2. Certified copies of the priority docum  |  |   |  |  |  |
| 3. Copies of the certified copies of the p   |  | received in this National Stage   |  |  |  |
| application from the International Bur  * See the attached detailed Office action for a  |  | treceived   |  |  |  |
|  |  | , received.   |  |  |  |
| Attachment(c)  |  |   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   | 4) Tinterview  | Summary (PTO-413)   |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No   | (s)/Mail Date   |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB   | i/08) 5) <u></u> Notice of !   | Informal Patent Application (PTO-152)   |  |  |  |

Paper No(s)/Mail Date \_\_\_\_\_.

6) Other: \_\_\_\_.

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Art Unit: 3715

#### **DETAILED ACTION**

### Response to Amendment

1. In response to the amendment filed on 9 November 2005, currently amended claims 1, 4-5, and 8-13, previously presented claims 2-3 and 6-7, and newly added claims 35-42 have been entered.

# Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 5-11 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims are single means claims (i.e., a laser transmitter comprising a modulator (claims 5-9), an apparatus comprising a judgment unit (claim 10), a controller having a modulator (claim 13)), where a means recitation does not appear in combination with another recited means, and are therefore subject to undue breadth rejection. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983). The only means of the claim covers every conceivable structure for achieving the stated

property, and is held as non-enabling as the specification discloses at most only those procedures known to the inventor.

## Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12 and 35-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Varshneya et al. (US Patent No. 6,386,879).

Regarding claims 1, 5, 9-10, and 13, Varshneya discloses a laser/transmitting receiving system for target practice including a laser transmitter and a laser receiver, wherein the laser transmitter has a modulator for modulating a transmitting laser signal by position information of said laser transmitter and time information (col. 4, lines 43-47) and wherein the laser receiver has an information extractor for extracting the time and position information from a received laser signal and a judgment unit for judging a shot effect using the extracted time and position information (col. 4, lines 58-65).

Regarding claims 2, 9, 13, and 35, Varshneya discloses that the laser transmitter transmits the modulated laser signal in response to a signal from a shooting apparatus of a weapon (col. 2, lines 57-59).

Regarding claims 3, 6, and 9, Varshneya discloses that the position information is of the shooting side position finder (col. 4, line 46).

Regarding claims 4, 8, and 35, Varshneya discloses that the position information is continuously updated (i.e., a GPS signal is used, col. 2, lines 62-65).

Regarding claims 7 and 35, Varshneya discloses that the modulator further transmits shot ammunition type information (col. 4, line 45).

Regarding claim 11, Varshneya discloses that the judgment unit judges the shot effect in accordance with a distance obtained from position information extracted from a laser signal received by a receiver and position information of the receiver and a time difference obtained from time information extracted from the received laser signal and time information of the receiver (col. 4, lines 50-65).

Regarding claim 12, Varshneya discloses a modulator that transmits shot ammunition type information (col. 4, line 45) as well as a judgment unit judges the shot effect in accordance with a distance obtained from position information extracted from a laser signal received by a receiver and position information of the receiver and a time difference obtained from time information extracted from the received laser signal and time information of the receiver (col. 4, lines 50-65). It is therefore inherent that, since the ammunition information parameter is sent to the target, the value would be taken into consideration if sent in calculating the shot effect.

Regarding claim 35, Varshneya discloses that the laser signal is sent in the shot direction since the emitter is placed in the bore of the gun (col. 2, line 58). Furthermore, Varshneya discloses that ID number and shot weapon type information are also transmitted (col. 4, line 45).

Regarding claim 36, as previously discussed, the shooting side position finder also generated time information and emits this along with the rest of the information in the laser signal directed at the target (col. 4, lines 58-65).

Regarding claims 37-41, Varshneya discloses that shot ammunition type, shot weapon type, time, velocity, and a 3D reference field (i.e., GPS data has (x,y,z) coordinates) are all parameters used in realistically simulating a shot effect (col. 5, lines 3-10; col. 4, lines 43-65).

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Varshneya in view of Berger (US Patent No. 6,813,593). Varshneya discloses smoke generators to realistically simulate the shot (col. 3, line 49). However, Varshneya does not expressly disclose varying the amounts of smoke based on the evaluated shot effect. However, Berger discloses a battle simulator where the amount of smoke released to simulate a shot is based on the accuracy of the shot (col. 2, lines 53-57). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the varying of the smoke release amount in order to simulate more closely to real-life the shot effect.

## Response to Arguments

5. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Stoica whose telephone number is (571) 272-5564. The examiner can normally be reached on M-F: 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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